

REMARKS

By virtue of this amendment claim 1-20 are currently pending in this application. Claims 1, 3, 10, 16, and 19 have been amended. No claims have been added or canceled by virtue of this amendment.

In a September 21, 2006 Final Office Action, the Examiner rejected claims 1, 10, and 16 under 35 U.S.C. § 101 because the Examiner believed the claims positively recited portions of the human body. The applicant respectfully traverses the rejection. However, the applicant has amended the claims as suggested by the Examiner to expedite the present case. The amendment is not believed to be a narrowing amendment. The applicant respectfully requests the Examiner to withdraw the rejection under 35 U.S.C. § 101.

In the September 21, 2006 Final Office Action the Examiner rejected claims 1, 3, 6, and 7 under 35 U.S.C. §§ 102(b), 103(a) as being anticipated by or obvious in view of United States Patent 5,709,713 ("Evans et al."). The applicant respectfully traverses this rejection. In particular, Evans et al. discloses a vascular stent through a vascular aneurysm. A vascular aneurysm allows blood flow through the vessel, but the wall of the blood vessel about the aneurysm is weak. Conversely, claims 1, 3, 6, and 7 do not relate to vascular aneurysms but rather blockage of a vessel. Thus, amended claim 1 provides "a main vessel stent graft to extend in a vessel until it is proximate the portion of the vascular anatomy to be bypassed, the main vessel stent graft having an access port on a wall adapted to be aligned with a puncture point on a wall of the vessel; a bypass stent graft adapted to reside in the perivascular space comprising a proximate end and a distal end; the proximate end of the bypass stent graft to be received in the access port on the wall of the main vessel stent graft in a sealing relationship; and the distal end of the bypass stent graft to be positioned in a sealing relationship with the vessel such that the bypass stent graft is to be positioned outside the vessel in a perivascular space to bypasses the portion of vascular anatomy," which is not shown, taught, or suggested by Evans et al. In fact, puncturing the vessel wall about a vascular aneurysm would be a significant health risk as the vessel is already weakened. Thus,

one of ordinary skill in the art would not consider modifying the device in Evans et al. to include a bypass stent traveling in the perivascular space because it would cause a health risk to the patient. Therefore, not only does Evans et al. not anticipate amended claim 1, amended claim 1 is not obvious in view of Evans et al. because to modify Evans et al. as suggested by the Examiner would be rejected as puncturing the wall about a vascular aneurysm would provide a health risk. For at least this reason, amended claim 1 is not anticipated or obvious in view of Evans et al.

Moreover, amended claim 1 recites a combination of elements including, for example, a main vessel stent graft extending in a vessel until it is proximate the portion of the vascular anatomy to be bypassed, the main vessel stent graft having an access port on a wall that is aligned with a puncture point on a wall of the vessel," which is not shown, disclosed or taught by Evans et al. Rather, and at most, Evans et al. discloses a port aligned with a flow path from one vessel to another vessel and not aligned with a puncture point on a wall of the vessel. In fact, as Evans et al. is silent regarding puncturing the vessel wall, it would have no reason or purpose for aligning an access port with the vessel wall. Thus, for at least this additional reason, amended claim 1 is not anticipated by or obvious in view of Evans et al.

Additionally, amended claim 1 recites a "bypass stent graft," which is not shown by Evans et al. Rather, as one of ordinary skill in the art would understand, Evans et al. discloses a branch connecting stent graft and not a bypass stent graft. Thus, for at least this additional reason, amended claim 1 is not anticipated by or obvious in view of Evans et al.

Thus, for at least the reasons identified, amended claim 1 is not anticipated by or obvious in view of Evans et al. The applicant respectfully requests the Examiner withdraw the rejection of claim 1 to Evans et al.

Claims 3, 6, and 7 depend either directly or indirectly from claim 1 and, at least by virtue of this dependency, are not anticipated by or obvious in view of Evans et al. Thus, the applicant respectfully requests the Examiner withdraw the rejection of claims 3, 6, and 7 to Evans et al.

Referring specifically to amended claim 3, amended claim 3 recites a combination of elements including, for example, “the seating surface and the engaging surface form a seal that inhibits blood flow into the perivascular space,” which is not disclosed, suggested or taught by Evans et al. As Evans et al. is silent regarding puncturing the vessel, the vessel prevents any blood flow into the perivascular space. Therefore, Evans et al. cannot provide any disclosure that would for a seal the inhibits blood flow into the perivascular space. For at least this additional reason, amended claim 3 is not anticipated by or obvious in view of Evans et al. Moreover, claim 6 depends from claim 3 and, at least by virtue of this dependency, is not anticipated by or obvious in view of Evans et al. The applicant respectfully requests the Examiner withdraw the rejection of claims 3 and 6 to Evans et al.

Referring specifically to amended claim 7, amended claim 7 further recites a combination of elements including, for example, the proximate end of the bypass stent graft is adapted to extend from a first vessel to the perivascular space and the distal end of the bypass stent graft is adapted to extend from the perivascular space to a second vessel. At most, Evans et al. discloses a branch connecting stent and not a by-pass stent. Moreover, because Evans et al. discloses a branch connecting stent is discloses a stent that extends from one vessel directly into another vessel and does not extend into the perivascular space as recited.

In the May 3, 2006 Office Action, the Examiner rejected claims 10, 12, and 13 under 35 U.S.C. § 102(b) as being anticipated by United States Patent 5,653,743 (“Martin”). The applicant respectfully traverses the rejection.

In particular, amended claim 10 recites a combination of elements including for example, “a main vessel stent graft, the main vessel stent graft to provide a flow path through an aneurysm of a vessel and including at least one access port on a wall adapted to be aligned with a corresponding number of branch vessels in the aneurysm; at least one branch stent graft adapted to be placed in the branch vessel prior to the placement of the main vessel stent graft; and at least one branch connecting stent graft, wherein each of the at least one branch connecting stent grafts received in a corresponding one

of the at least one access port on the wall of the main vessel stent graft such that a distal end of the branch connecting stent graft is adapted to reside in a branch vessel in a sealing relationship with the at least one branch stent graft and a proximate end of the branch connecting stent graft forms a sealing relationship with the access port and the branch connecting stent provides a flow path through the aneurysm," which is not shown of disclosed by Martin. Rather, and at most, Martin discloses a main vessel stent graft and a branch connecting stent graft extending from the main vessel stent graft directly to the branch vessel. The Examiner appears to agree Martin does not disclose the main vessel, branch, and connecting stents (see page 11 of Final Office Action – "Martin does not disclose a corresponding number of connecting stents.") The present invention discloses, however, a branch stent graft, a main vessel stent graft, AND a branch connecting stent graft. As Martin at most discloses two different stents, it cannot anticipated claim 10. Moreover, Martin discloses a vascular reconstruction system substantially devoid of aneurysms. Thus, to the extent Martin discloses a main vessel stent and connecting stents, the stents do not reside in aneurysms. Furthermore, the connecting stent graft does not travel from the main vessel stent through the aneurysm to a branch vessel, which requires alignment of the branch connecting stent between the accessport and the branch vessel, which may be remote from each other over space. Rather, and at most, Martin discloses a connecting stent residing between a first vessel and a second *adjacent* vessel. Thus, Martin does not anticipate amended claim 10. Claims 12 and 13 depend directly from claim 10 and, at least by virtue of the dependency, are not anticipated by Martin. Thus, applicant respectfully request the rejection of claims 10, 12, and 13 as being anticipated by Martin be withdrawn.

In the May 3, 2006 Office Action, the Examiner rejected claim 2 under 35 U.S.C. § 103(a) as being unpatentable and obvious over Evans et al. in view of United States Patent 5,961,548 (Shmulewitz). The applicant respectfully traverses the rejection. In particular, claim 2 depends from claim 1 and, at least by virtue of the dependency, is not obvious or anticipated by Evans et al. The Examiner relied on Shmulewitz to disclose puncturing a main vessel stent to allow placement of another stent. However, Shmulewitz does not cure the defect of Evans et al. noted above in relation to claim 1. Claim 2 is not anticipated by Evans et al. and Shmulewitz either alone or in any

reasonable combination thereof. Thus, the applicant respectfully requests the Examiner withdraw the rejection of claim 2.

In the May 3, 2006 Office Action, the Examiner rejected claims 4, 5, 9, 19, and 20 under 35 U.S.C. § 103(a) as being unpatentable and obvious over Evans et al. in view of United States Patent 5,443,497 (“Venbrux”). The applicant respectfully traverses the rejection. In particular, claims 4, 5, and 9 depend directly or indirectly from claim 1 and, at by virtue of this dependency are not obvious in view of Evans et al.. The Examiner relied on Venbrux to disclose a material between a seating surface and an engaging surface, which does not cure the defect of Evans et al. noted above. Thus, for all the reasons identified above, claims 4, 5, and 9 are not obvious over Evans et al. as combined with Venbrux. Regarding claims 19 and 20, claim 19 has been amended to contain recitations similar to amended claims 1 and 3 above. At least by virtue of this similarity, claim 19 and claim 20, which depends from claim 19, are not anticipated or obvious over Evans et al. as combined with Venbrux.

Regrading specifically claims 19 and 20, the applicant respectfully traverses the rejection of the claims under 35 U.S.C. § 103(a) as being unpatentable and obvious over Evans et al. in view of Venbrux. In particular, claim 19 recites a combination of elements including, for example, means for coupling the first stent graft and the second stent graft in a sealing relationship about the port to inhibit blood flow into a perivascular space and means for coupling the second stent graft to the second vessel to inhibit blood flow into the perivascular space,” which is not disclosed by Evans et al. or Venbrux. Rather, the bypass line needs to seals with a proximal stent 12 and a distal stent 14 rather than a main stent and second vessel. Thus, for at least this additional reason, claim 19 is patentable and not obvious in view of Evans et al. and Venbrux. Claim 20 depends from claim 19 and, at least by virtue of this dependency is patentable and not obvious over Evans et al. and Venbrux.

The Examiner rejected claim 8 under 35 U.S.C. § 103(a) as being unpatentable and obvious over Evans et al. in view of Martin. The applicant respectfully traverses the rejection. In particular, claim 8 recites a combination of elements including “a main

vessel stent graft”, “a bypass stent graft”, and “a connecting branch stent”, which is not disclosed, suggested, or taught by Evans et al. or Martin. At most, Evans et al. and Martin disclose a main vessel stent and a connecting branch stent. Neither Evans et al., nor Martin disclose placement of a bypass stent graft and connecting the bypass stent graft to the main vessel stent graft by piecing the main vessel stent graft and placing a branch connecting stent. For at least this additional reason, claim 8 is patentable and not obvious in view of Evans et al. and Martin either alone or in any reasonable combination thereof.

The Examiner rejected claim 11 under 35 U.S.C. § 103(a) as being unpatentable over Martin in view of US Patent Number 5,961,548 (“Shmulewitz”). The applicant respectfully traverses the rejection. In particular, Shmulewitz like Martin discloses at most a main stent and a branch connecting stent. Claim 11, however, depends from claim 10 and recites “a main vessel stent graft”, “a branch stent graft”, and “a branch connecting stent graft.” For at least this reason, claim 11 is patentable and not obvious over Martin in view of Shmulewitz.

The Examiner rejected claims 14 and 16 under 35 U.S.C. § 103(a) as being unpatentable and obvious over Martin in view of US Patent Number 5,639,278 (“Dereume et al.”). The applicant respectfully traverses the rejection. Claim 14, for example, depends from claim 10 and recites “a main vessel stent graft”, “a branch stent graft”, and “a branch connecting stent graft.” Martin, as explained above, at most discloses a main vessel stent and a branch connecting stent and not a separately placed branch stent. Dereume et al. does not cure the defect of Martin noted above. For at least this reason, claim 14 is patentable and not obvious over Martin in view of Dereume et al.. Amended claim 16 similarly recites “a main vessel stent graft adapted to reside in a main vessel; at least one branch stent graft; and a corresponding number of connecting stents,” which is not disclosed by Martin or Dereume et al. Dereume et al., however, does not cure the defect of Martin regarding showing “a main vessel stent graft”, “a branch stent graft”, and “a branch connecting stent graft.” Rather, Dereume et al. shows a main vessel stent have a bifurcated end to form legs. Dereume et al. provides connecting stents through the main vessel stent with bifurcated ends. Dereume et al., however, does not disclose

“a main vessel stent graft”, “a branch stent graft”, and “a branch connecting stent graft.” Thus, for at least this reason, claim 14 and 16 are patentable and not obvious over Martin in view of Dereume et al.

For all the foregoing reasons, the applicant respectfully requests the Examiner reconsider and withdraw the pending rejection and allow claims 1-20. Allowance of the pending claims is respectfully requested.

If an extension of time under 35 C.F.R. § 1.136 is required to obtain entry of this Amendment, such an extension is requested. If there are fees due under 37 U.S.C. § 1.16 or 1.17 which are not otherwise accounted for, please charge our Deposit Account No. 08-2623.

Respectfully submitted,



Dated: October 9, 2006

Brian Kinnear
Registration No. 43,717
ATTORNEY FOR APPLICANT
HOLLAND & HART LLP
555 17th Street, Suite 3200
Post Office Box 8749
Denver, CO 80201-8749
Telephone: (303) 295-8170
Facsimile: (303) 295-8261